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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,389	12/29/2000	Terry L. Fry	9849-003	9558

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EXAMINER

BAYARD, EMMANUEL

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 07/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,389

Applicant(s)

FRY, TERRY L.

Examiner

Emmanuel Bayard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Griffith U.S Patent 6,073,050.

As per claims 1, 14 and 22, Griffith discloses an economical, compact, frequency hopping, spread spectrum, wireless data telemetry transceiver (see fig.3 element 40), comprising: a frequency hopping transmitter (see fig.3 element 44 and col.8, lines 54-64); a frequency hopping receiver (see fig.3 element 48 and col.9, lines 52-60); said receiver including a first bandpass filter (see fig.9 element 53 and col.9, line 48) tuned to a selected IF center frequency and having a first selected IF bandpass bandwidth, said first bandpass filter (53) generating a first filtered IF signal (see col.15, lines 45-50); said first filtered IF signal including a frequency shift keying modulated waveform (see col.15, line 39); said receiver further including a frequency discriminator (see fig.9 element RSSI.

✓ Note that RSSI is well known in the art as to perform discrimination function. Therefore the RSSI of Griffith is functionally equivalent to the claimed frequency discriminator.) being configured to receive said first filtered IF signal and comprising a limiter amp (see fig.9 element A2 and col.15, lines 36, 66) stage and a quadrature detecting mixer (see

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fig.9 element 84 and col.16, lines 7-13) having first and second inputs and an output; said frequency discriminator receiving said first filtered IF signal frequency shift keying (see col.15, line39) modulated waveform and generating a demodulated (see col.9, lines 53-57 and col.15, line22-23) baseband video digital data signal in response thereto; said frequency discriminator further comprising a second bandpass filter (see fig.9 element 54 and col.15, lines 52-67) tuned to said selected IF center frequency and having a second selected IF bandpass bandwidth, said second bandpass filter being responsive to said first filtered IF signal and generating a second bandpass filter output signal in response thereto; said limiter amp stage being configured to receive said second bandpass filter output signal and to generate a limiter amp output signal in response thereto; said frequency discriminator further comprising a third bandpass filter (see elements L6 with C8 combined and col.15, line 29) tuned to a selected IF center frequency and having a third selected IF bandpass bandwidth, said third selected IF bandpass bandwidth being greater than said first selected IF bandpass bandwidth and said second selected IF bandpass bandwidth; said third bandpass filter (see elements L6 with C8) being responsive to said limiter amp output (see element A2) signal and generating a quadrature filtered limiter amp output signal in response thereto; said limiter amp output signal also being passed to said quadrature detecting mixer (see element 84) first input; said quadrature detecting mixer (see fig.9 element 84) second input being configured to receive said quadrature filtered limiter amp output signal from said third bandpass filter(see elements L6/C8) , said first quadrature detecting mixer generating a demodulated (see col.9, lines 53-57 and col.15, line22-23) baseband signal in response thereto.

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As per claims 2, 15, Griffith inherently includes a said frequency shift keying modulated waveform comprising a minimum shift keying waveform.

As per claims 3, 16 Griffith includes said frequency discriminator further comprising an IF amp gain stage configured to receive said first filtered IF signal and generating an amplified first filtered IF signal therefrom (see col.15, lines 47-67)

As per claim 4, Griffith inherently includes, said first bandpass filter comprising a prefabricated 5, 18 Griffith includes, said first bandpass filter comprising a prefabricated ceramic filter (see col.15, line 63).

As per claims 6 and 17, Griffith inherently includes, said second bandpass filter comprising a prefabricated, pre-tuned filter.

As per claims 7 and 18, Griffith includes said second bandpass filter comprising a prefabricated ceramic filter (see col.15, line 63).

As per claim 8, Griffith inherently includes said third bandpass filter comprising a prefabricated, pre-tuned filter.

As per claim 9, Griffith includes, said third bandpass filter comprising a prefabricated ceramic filter (see col.15, line 63).

As per claims 10 and 19, Griffith inherently includes, said third bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth approximately double said first bandpass filter bandwidth.

As per claim 11, Griffith inherently includes, said second bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth substantially equal to said first bandpass filter bandwidth.

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As per claims 12 and 20, Griffith includes, said Limiting amp and said Mixer being integrated into a single integrated circuit (see fig.9 and col.16, line 15).

As per claims 13 and 21, Griffith includes, said single integrated circuit also including said IF amp gain stage configured to receive said first filtered IF signal (see fig.9 and col.16, line 15).

As per claim 23, Griffith inherently includes, said quadrature bandpass filter comprising a prefabricated fixed tuned filter.

As per claim 24, Griffith inherently includes, said quadrature bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth approximately double the IF bandpass filter bandwidth.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Broderick U.S. patent no 5,170,500 teaches an intermediate frequency circuit for cellular telephone.

Miliani et al U.S. patent No 5,682,426 teaches a subscriber site method.

Miyazaki U.S Patent No 5,802,447 teaches a transmitter receiver for a radio communication.

Coash U.S. patent No 4,748,688 teaches an electromagnetic wave receiver.

Panther U.S Patent No 5,537,676 teaches a method of receiving data signals in a radio transceiver.

Rogers Jr U.S. Patent No 4,087,756 teaches a FM feedback demodulator.

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Chasek U.S. patent No 4,339,828 teaches an automatic method for advantageously trading signal distortion.

Geiger et al U.S. patent No 5,857,003 teaches a digital radio having improved modulation and detection.

Ohta et al U.S. Patent No 4,563,651 teaches a FM demodulator.

Tomlison U.S. patent No 4,754,228 teaches a method and apparatus for demodulating an angle modulated signal.

Dent U.S. patent No 5,668,837 teaches dual-mode radio receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 703 308-9573. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM)
Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 703 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Emmanuel Bayard
Primary Examiner
Art Unit 2631

7/13/04

EMMANUEL BAYARD
PRIMARY EXAMINER

